

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009980**Date Inspected:** 05-Nov-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Yumin and Wu Zhi Cheng**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Joe Alaniz was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

OBG Assembly Yard

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member(s) is/are identified as Bike Path cantilever BK001-016 and BK001-017. The weld designations reviewed are as follows:

BK001-016

1. BK001-005, 009

BK001-017

1. BK001-005, 007, 002, 004

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector observed a rejectable indication at the time of testing. The QA Inspector generated a TL-6028 MT report on this date. Welds MT verified was identified as listed below:

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BK001-016

1. BK001-016-007

This QA Inspector observed a linear indication in the above noted weld accepted by ZPMC QC MT personal. This QA Inspector issued an incident report on the above noted MT rejection.

1AW+1BW

SMAW repair welding on excavation on weld joint 008 located on OBW1A.

Welder is identified as Mr. Han Xiaofeng (054467). ZPMC QC is identified as Li Yang.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and CWR repair procedure #875.

SMAW repair welding on excavation on weld joint 008 located on OBW1A.

Welder is identified as Mr. Dai Lu (048559). ZPMC QC is identified as Wu Li Yang.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and CWR repair procedure #875.

SMAW repair welding on excavation on weld joint 008 located on OBW1A.

Welder is identified as Mr. Zhang Feng (049769). ZPMC QC is identified as Wu Li Yang.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and CWR repair procedure #875.

SMAW repair welding on excavation on weld joint 008 located on OBW1A.

Welder is identified as Mr. Zhang Quanfa (066326). ZPMC QC is identified as Wu Li Yang.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and CWR repair procedure #875.

SMAW repair welding on excavation on weld joint 008 located on OBW1A.

Welder is identified as Mr. Feng Huajun (066258). ZPMC QC is identified as Wu Li Yang.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and CWR repair procedure #875.

SMAW repair welding on excavation on weld joint 008 located on OBW1A.

Welder is identified as Mr. Li Wenguo (066261). ZPMC QC is identified as Wu Li Yang.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and CWR repair procedure #875.

SMAW repair welding on excavation on weld joint 008 located on OBW1A.

Welder is identified as Mr. Qie Jianzhou (067571). ZPMC QC is identified as Wu Li Yang.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-FCM-Repair-1 and CWR repair procedure #875.

BK1

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FCAW welding on excavation on weld joints 003 and 004 located on BK001-018.

Welder is identified as Mr. Zhang Hanming (220066). ZPMC QC is identified as Wu Li Yang.

The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-U4c-F.

NDT Observation

This QA Inspector observed ZPMC Magnetic Particle (MT) Technician performing MT on various locations in the trial assembly yard. Locations are as followed:

2AW+2BW

Excavation areas at OBW2A-003 side plate (external) weld joint on segment 2W. Y locations (pulled from bottom plate) and numbers of MT Indications observed are as followed:

1. Y location 875mm (off bottom plate). 1 MT transverse indications observed.
2. Y location 1705mm (off bottom plate). 1 MT transverse indications observed.
3. Y location 2770mm (off bottom plate). 1 MT transverse indications observed.
4. Y location 3780mm (off bottom plate). 1 MT transverse indications observed.
5. Y location 4070mm (off bottom plate). 1 MT transverse indications observed.
6. Y location 5160mm (off bottom plate). 1 MT transverse indications observed.
7. Y location 5470mm (off bottom plate). 1 MT transverse indications observed.
8. Y location 6320mm (off bottom plate). 1 MT transverse indications observed.
9. Y location 7135mm (off bottom plate). 1 MT transverse indications observed.

Miscellaneous Work In Progress

QA Inspector observed ZPMC's personnel performing various job functions in the trial assembly yard. Locations and description of work are as followed:

UT reject excavation was performed at OBW1-006 deck plate (external) weld joint on segment 1W. Y locations and lengths are as followed:

1. Y location 16570mm (off counter weight side) and length of excavation is approximately 112mm.
2. Y location 21690mm (off counter weight side) and length of excavation is approximately 120mm.

UT reject excavation was performed at OBW1-007 deck plate (external) weld joint on segment 1W. Y locations and lengths are as followed:

1. Y location 1460mm (off counter weight side) and length of excavation is approximately 125mm.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (134-8257-0045), who represents the Office of Structural Materials for your project.

Inspected By:	Alaniz,Joe	Quality Assurance Inspector
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Reviewed By:	Carreon,Albert	QA Reviewer
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